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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,775	01/12/2004	Michael Ronald Miller	140525	1774

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EXAMINER

RAMIREZ, JOHN FERNANDO

ART UNIT PAPER NUMBER

3737

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,775

Applicant(s)

MILLER ET AL.

Examiner

John F. Ramirez

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

After a review of applicant's remarks filed February 3, 2006, the examiner of record acknowledges the amendment to the claims on pages 2-5.

Applicant's arguments with respect to claims 1, 9 and 14 have been fully considered but they are not persuasive. Therefore, the following new office action is provided in order to expedite the prosecution of this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 9, 12, 14, 15, and 19 are rejected under 35 U.S.C. 103(a) as being anticipated by Suzuki et al. (US 4,878,499) in view of Knapp, II et al. (U.S. 6,740,046).

Suzuki et al., teaches all the limitations of the claimed subject matter except for mentioning specifically a respiratory measurement system with a plastic cord that is configured to be placed across a chest of a person, the plastic cord device being substantially transparent to x-rays.

However, the respiratory measurement system with a plastic cord that is configured to be placed across a chest of a person, the plastic cord device being substantially transparent to x-rays.

The Knapp, II et al. patent teaches a respiratory measurement system with a plastic cord that is configured to be placed across a chest of a person, the plastic cord (According to applicant's specifications on page 2, paragraph [0005], the "strapping device" is equivalent to "plastic cord". Furthermore, Encarta® World English Dictionary, North American Edition defines the term "cord" as fastening or belt: a length of material used as a fastening or belt) being substantially transparent to x-rays (Encarta® World English Dictionary, North American Edition defines the term "transparent" as easily seen through: allowing light to pass through with little or no interruption). Accordingly, The Knapp, II et al. patent in Figure 1 and column 4, lines 5-26 discloses a respiratory diagnostic system with a flexible elastic breathing belt, for wrapping around the chest or torso of a patient.

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Suzuki et al., with the above discussed enhancements would have been considered obvious because such modifications would enhance the capabilities of the system, resulting in a safer operating environment.

Claims 3-5, 7, 8, 10, 11, 13, 16-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 4,878,499) in view of Watson et al. (US 4,308,872).

In reference to claims 3-5, 8, 10, 11, 13, and 16-18 Suzuki et al., teaches all the

Art Unit: 3737

limitations of the claimed subject matter except for mentioning specifically the system wherein respiratory function comprises a lung volume level, wherein the plastic cord device comprises a polypropylene string, further comprising a plastic tube configured to be placed across the chest of the person, and the plastic cord device being disposed in the plastic tube.

However, the system wherein respiratory function comprises a lung volume level, wherein the plastic cord comprises a polypropylene string, further comprising a plastic tube configured to be placed across the chest of the person, and the plastic cord being disposed in the plastic tube are conventional in the art as evidenced by the teachings of Watson et al. (US 4,308,872).

The Watson et al. patent teaches a system wherein respiratory function comprises a lung volume level, wherein the plastic cord comprises a polypropylene string, further comprising a plastic tube configured to be placed across the chest of the person, and the plastic cord being disposed in the plastic tube.

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Suzuki et al., with the above discussed enhancements would have been considered obvious because such modifications would have provided clinically more accurate data on breathing volumes derived from continuous measurements of the cross sectional areas of the upper chest and the lower abdomen.

Claims 7, 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 4,878,499) in view of Applicant's admitted prior art (AAPA).

Suzuki et al., teaches all the limitations of the claimed subject matter except for mentioning specifically a system that has a tabletop having a securing device and a pulley coupled thereto, wherein a first portion of the plastic cord extends between securing device the securing device and the pulley, the securing device and the pulley being positioned on the tabletop to allow the chest of the person to be disposed between the securing device and the pulley, and wherein a second portion of the plastic cord extends from the pulley to the sensor.

However, a system that has a tabletop having a securing device and a pulley coupled thereto, wherein a first portion of the strapping device extends between securing device the securing device and the pulley, the securing device and the pulley being positioned on the tabletop to allow the chest of the person to be disposed between the securing device and the pulley, and wherein a second portion of the plastic cord extends from the pulley to the sensor are conventional in the art as evidenced by the teachings of US application 10/707775.

The US application 10/707775 teaches a system that has a tabletop having a securing device and a pulley coupled thereto, wherein a first portion of the strapping device extends between securing device the securing device and the pulley, the securing device and the pulley being positioned on the tabletop to allow the chest of the person to be disposed between the securing device and the pulley, and wherein a second portion of the plastic cord extends from the pulley to the sensor. (Page 5, paragraph [0016]).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Suzuki et al., with the above discussed enhancements would have been considered obvious because such modifications would have provided clinically more accurate data on breathing volumes derived from continuous measurements of the cross sectional areas of the upper chest and the lower abdomen.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

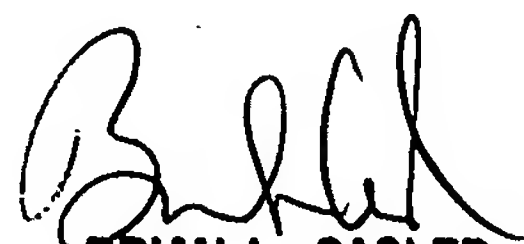
Art Unit: 3737

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JFR
03/27/06


BRIAN L. CASLER
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TECHNOLOGY CENTER 3700